Locational Analysis of Cottage Industries in Eastern Uttar Pradesh

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CONTENTS

LIST OF MAPS

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Jamshed Nasir

(Jamshed Nasir)

INTRODUCTION

A national plan for India would necessarily aim at securing the walfare of the community as a whole, but in view of the fact that the masses in the villages constitute nearly 80 per cent of the population and form the backbone of the nation, their well-being should be the special concern of the state and the primary objective of the national plan.

The larger number of rural people do not get employment in agriculture for full time, atleast for three to four months in a year, they are unemployed. Due to heavy pressure of population on agricultural land. Some farmers are unable to procure adequate food, clothing and other essential needs of an average man and a large number of them live below the powerty line. Development of cottage industries they provide opportunities to the rural folk to get alternative source of earnings. There-by increasing the marginal this is bound to help in improving the standard of living of rural masses. The competition from the mill products in some parts led to the closure of the indigenous cottage and rural industries. No gainful occupation having been provided as a substitute, this has

resulted in chronic under-employment, economic and social degradation and low standard of living for the major portion of our rural population. It is estimated that nearly half of the man power of the country remains unutilized as far as gainful employment is concerned.

It has been realized that without the development of rural and cottage industries balanced growth of the country is not possible. Therefore, much attention has now been paid to the development of rural and cottage industries. The present work is related to "the locational analysis of cottage industries in Eastern Uttar Pradesh", which lies between the parallels of 25°10' and 26°21' north and the meridians of 82°10' and 84°40' east. The area under study is triangular in shape and lies east of district Ballia, base of the triangle is the boundry line of the districts of Faizabad, Sultanpur, Pratapgarh and Allahabad.

Industrial geography is a branch of Economic Geography, Economic Geography envisages to explain the relation-ship between physical environment and economic activities of man. Human activities depend upon the nature of physical factors. The extent to which man utilizes his physical environment depends upon cultural factors which

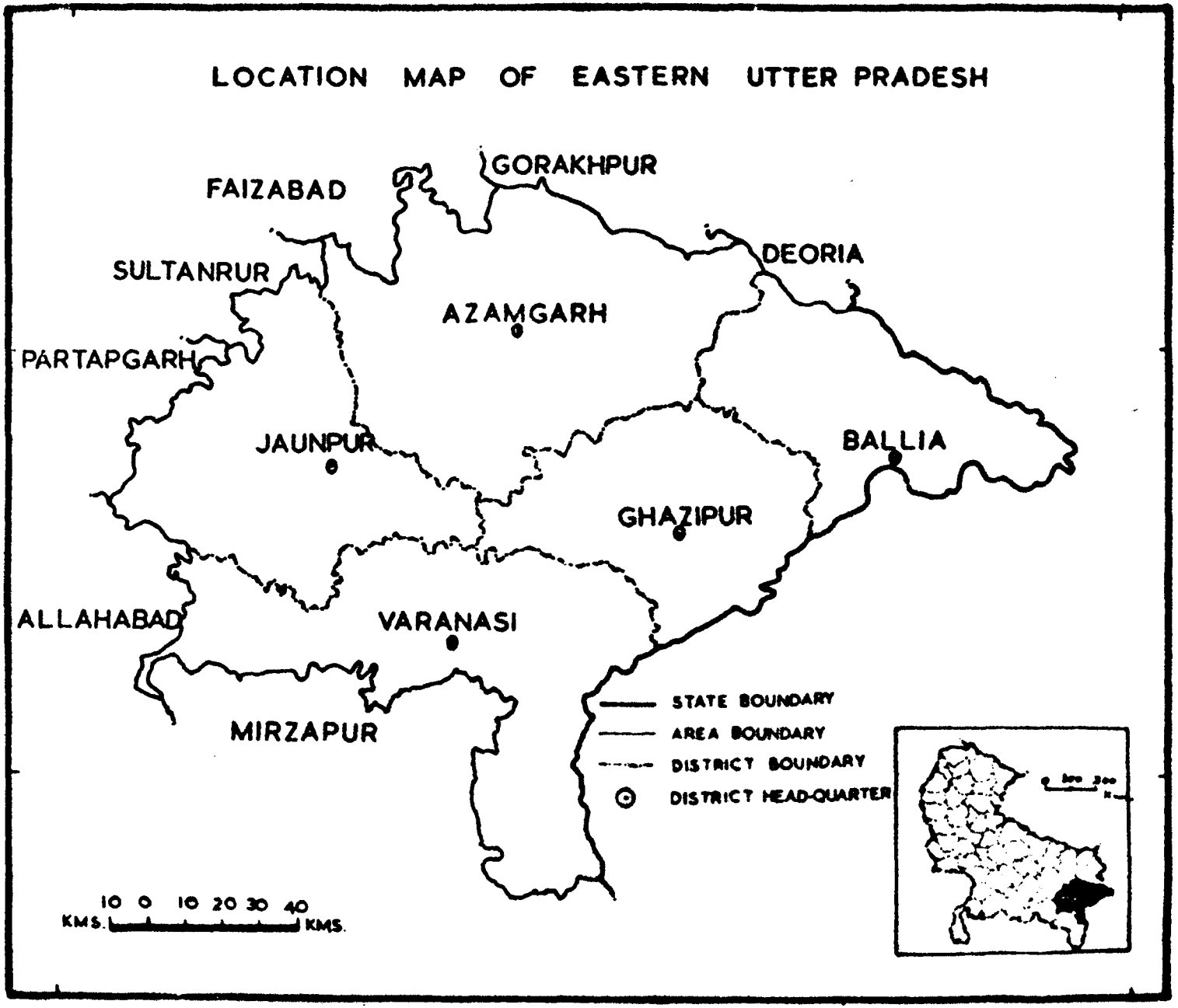
LOCATION MAP OF EASTERN UTTER PRADESH
GORAKHPUR
FAIZABAD
DEORIA
SULTANRUR
AZAMGARH
PARTAPGARH
JAUNPUR
BALLIA
GHAZIPUR
ALLAHABAD
VARANASI
MIRZAPUR
STATE BOUNDARY
AREA BOUNDARY
DISTRICT BOUNDARY
DISTRICT HEAD-QUARTER
10 0 10 20 30 40
KMS.
KMS.

Fig. No. 1.

have evolved themselves out of the complex physical setting.

The present work relating to the location of cottage-industries in the Eastern Uttar Pradesh is divided into five chapters viz., chapter I, deal with Meaning and Scope; Chapter II relates to Physical and cultural environments; Chapter III discusses Cottage Industries and Rural Economy; Chapter IV Studies Locational factors of some important cottage industries and Chapter V deals with Conclusion.

CHAPTER I

MEANING AND SCOPE

Cottage-industries have constituted the central element in the Organic Unity and Culture of the people of India. They have thrived through the ages when society was organized more or less into self-sufficient and self-contained units. The pains taking efforts of the cottage industries and their unique products found their fullest support before the begining of the British rule in the country. At that time political changes were taking place but still the product of cottage industries found its way over some parts of the world.

With the advent of British rule in India conditions changed. Trade restrictions were imposed and several steps were taken to destroy the Indian cottage industries. The dawn of machine age and the introduction of large scale manufacturing industries also struck further blows. The demand for the products of the cottage industries suffered through competition with factorys made products. Cottage industries however continued to be the chief means of levelihood for the large number of people in this country.

Since independence in 1947, Indian government realized that further decay of cottage industries should be checked and they should be given the legitimate place in the national economy and every help should be rendered to them to organize in a manner capable of meeting the changing conditions. This was, no doubt, a hold step which showed the awakening conciousness of the people in respect of cottage industries and their role in our economy.

Cottage industries have been defind in different times with slight change and modification. In 1960, the Indian industrial commission defined cottage industries as, "industries carried on in the home of worker which we have designated as cottage industries. In these the scale of operation is small and there is but little organization so that they are, as a rule, capable of supplying only local needs".[1] This definition is now obsolete.

An other vague definition is offered by the Central Banking Enquiry Committee as, "industries found in rural areas which can be named as village and domestic industries

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1. Joshi, N.C., Cottage and Small Scale Industries in India a Study, New Delhi, pp.3-11.

providing subsidiary occupation for agriculturists". Similarly the 'Bombay Industrial Survey Committee opines, "cottage industries are those where no power is used and goods are manufactured,generally speaking, in the home of artisan himself and occasionaly in small Karkhanas (workshop) where not more than nine workers are employed."[1]

The report of the Fiscal Commission 1949-50, states that the definition of cottage industries is not free from ambiquity. "A cottage industry is one which is operated mainly or primarily with the help of the members of the family as a whole time or part time occupation".

A similar but some what different view is adopted by the Planning Commission according to which cottage industries are mainly of rural character and generally associated with agriculture involving operation mostly by hand and are carried on primarily with the help of the family members.[2]

E.C.A.F.E. defines that cottage or home industry is one, the products of which requires skill and craftmanship in the manufacture and which is carried on wholly or primarily

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1. op. cit., p.40.
2. Rao, R.V., Cottage and Small Scale Industries and Planned Economy, Delhi, pp.18-21.

with the help of members of the family either as whole time or part time occupation. Cottage industry may also be defined as one that is carried on in a place which is not a factory for the purpose of Factory Act of 1948, i.e., an industry which is carried on wholly or primarily with the help of the members of the family as a whole or part time occupation.

Definition of cottage industries may be based upon the location i.e., in terms of working place, the number of persons employed, the volume of capital, the economy structure and technique i.e., interms of manual skill and other consideration such as the extent of market, the nature of finished product and working time spent on the industries.

Characteristic of Cottege Industries in India

Cottege industries constitute the backbone of the rural economy of India. They are carried on by handicraftmen or artisans in their own homes in small Karkhanas (workshop) of entrepreneur type, or some other place in the same locality. The oil pressing, the spining, the weaving, the shoe making, dyeing and printing of cloths, the making of arnaments and many others are some of the important examples of industries located in the homes of the artisans.

Cottage industries are worked by the artisan assisted by the members of his family. They also employ a few apprentice or a couple of labourers on daily wages. The number of workers in them usually does not exceed the number of family members.

The amount of capital invested is usually small and is either supplied by the middle man as an advance for the purchase of finished product even handi-craftsmen from their meager resources. The necessary skill for carrying on the crafts is handed from father to son or from master to the apprentices.

Special emphasis is laid on the quality and excellence of the product through the use of craftmen's technique and skill and creative effort.

The raw material is usually available near at hand while the tools needed are very few and simple and in most cases are manufactured locally. It is often supplied by the consumers, the middle men and purchased by the artisan himself. The power needed is mostly human hand or animal power while the power driving machinery is either not used or used on small scale with no division of labour.

The largest section of cottage industry thrives on local markets though of late, they now even cater to foreign markets, e.g. silk, gold and silver thread and brocades and loces of Varanasi; the wood, handloom saries of Azamgarh, emboidered saries of Varanasi have earned a great name both in India and abroad. The organization of industries is generally medieval in character though efforts are now being made to reorganize it on modern lines, specially with a view to offer better apportunities to the more skilled or artistic cottage workers.

Classification of Cottage Industries

Cottage industries may be classified from different points of view e.g., survival,occupation provided, nature of products, structure and organization, raw material used and the technological point of view.

From the stand point of survival, cottage industries may be classified into four different classes (a) Those which have succumbed to the competition with factory industries like cotton spining (b) Those whose products are competing with the machine-made goods like handmade paper. (c) Those which are persistante because of their connection with agriculture or because artisons have been able to

adopt themselves to new situation (d) Village and urban industries producing artistic products which can not be done by machines and which do not compete with factory products, e.g. Varanasi silk, beekeeping, gur making etc.

From the stand point of occupation provided, they may be broadly classified as (a) industries providing supplymentary occupation to agriculturist e.g. handweaving, basket making, rope making, flour grinding, Biedi etc. (b) Industries consisting mostly of village crafts and providing whole time occupation e.g. pottery, black smithy, carpentry, oil crushing by ghani, handloom weaving by professional weavers, village tanning industries, cart making and boot making (c) Urban industries providing part or whole time occupation e.g. gold and silver thread, wood and ivory carring, brass and metal industries, toy making, silk fabric, calico printing and dyeing.

From the stand point of product, the cottage industries may also be put under four heads (i) Industry subsidiary to agriculture which are usually carried on in off time by the farmers like hand spinning, weaving, gur making, flour grinding, rice pounding, cotton ginning, rope and basket making, silk weaving, rearing of cocoons

and beekeeping etc. (ii) Village subsistent industries carried on by village carpenters, potters black smiths, oil men, tanner etc., who supply the needs of the village. (iii) Village arts industries which are carriedon by handicrafts men and which show a high standard of art and craftman ship and cater for national as well as international markets, e.g. toy making, carpet weaving, silk weaving, button manufacture, artistic clay modelling paper making, manufacturer of sunhat, bonecomb, vegetable dyes, lungies, saries, glass bangles manufacture etc. (iv) Urban art and handicraft, which represent a higher standard of artistic excellent craftmanship and organization e.g. silk industries of Varanasi.

According to structure and organization the cottage industries may be classified as (i) those in which the artisan deals directly with the consumer and works with his own capital e.g. those two industries out of four mentioned earlier in classification of occupation provided (ii) those in which although the artisan deals directly with the consumers yet the raw material is provided by the latter e.g. wood work, furniture, gold and silver work, leather work (iii) Those in which both cash and raw materials are provided by middle men such as carpet, cloth and

silk weaving (iv) those in which the artisans work in his home but the raw materials are obtained from the Karkhana (workshop) like metal work tailloring, carpentry, embroidery and brick making (v) Those in which artisan works in Karkhana (workshop) under the guidance of Karkhanadar or master artisan e.g. lace and gota, gold, silver wire making, brass, iron and copper utensils, shoe making artistic pottry , carpet weaving, and button making.

From the stand point of the raw material used, the cottage industries may be classified into seven categories (1) Those dealing with cotton, jute, wool and silk, ginning, spimning and weaving of cotton, Newar, durree and carpet tape making, seri-culture, silk reeling, spinning and weaving, woollen blanket making, cotton and woollen knitted goods, woollen carpets, printing dyeing of cotton and silk cloths. (2) Those dealing with metal brass and copper utensils, agriculture implements etc. (3) Those dealing with wood furniture, Basket, carts, boot, wood carving and (4) Industries dealing with leather like tanning of leather, manufacture of foot wear, suitcases, hand bags and straps, (5) Industries dealing with earth and sand like pottery and earthern ware, brik and tilemaking,

slate and stone ware making, earthern toy etc. (6) Industries connected with food like those of rice and pulses, husking ground nuts, flour grinding, oil pressing, confectionary and sweet making, gur making, preservation of pickles, jelly and achar making, (7) Other industries like the bangle, paper, umbrella making, book binding, wire drawing and manufacturing of badla, salma, chauki, and golds thread and leaves, ivory articles, embossing, paper toys cultivation of lace, rose oil, toilet manufacture, articles from horns and bones, snuff making, match work, paints and varnishes, ink, drug and mediciene etc.

From the technological point of view, industries may be divided into (a) those where there is no competition between large scale, small scale and cottage industries as in the case of beekeaping, gur making and certain handicrafts like sari or handkerchief making (b) those in which cottage and small scale industries are concerned either with the manufacturing of certain parts or with certain stages of production in a manufacturing process in which predominant role is that of large scale industries (c) those in which there is competition between largescale and small scale or cottage industries e.g. hand looam cloths, khandsari, sugar, leather goods etc.

According to Prof.Radha Kamal Mukerji, cottage industries may be divided into four groups viz., peasant art and crafts carriedon as subsidiary occupation by cultivators which supply their own house hold needs and which some time intended for external markets; industries which supply the needs of the village; village art industries carried on by artisan and urban arts and craft.

Related Problems in the Development of Cottage Industries

1. Raw material - Industrial survey committee of India have pointed out that due to competition with the larger producer and the lack of financial resources, these industries do not get raw material of good quality and in some cases they do not get enough supply even of the inferior quality of raw materials. The other difficulty which these industries experience is the comparatively high price they have to pay for the raw materials. Even where supplies of raw materials are locally available, the artisans find difficulty in obtaining their requirements because they are mostly purchased by the large industries in advance.

2. Technique of manufacturing - An equally important handicap from which the artisan suffers, is the persistance

of methods of manufacturing without model implements e.g. the throw shuttle persists in many weaving centres and improvement such as the use of bean warp, dobbies, and other uptodate implements used in cottage weaving industrial countries are rarely employed. The same old methods of manufactures are employed in almost all branches of cottage industries with the result that in-efficiency in these industries is increasing. With the passage of time, improved tools and simple machinery are becoming more and more necessary to enhance the competitive efficiency of small industries.

3. Market - The existing methods for the marketing of the products of cottage industries are defective. Types and areas of consumption are shifting but only a few producer try to follow them. There are no sound channels of communication between the small manufacturer and ultimate consumer. In many cases the artisans do not know in what part of the country their goods are likely to be used, or who buys them. Under the stress of economic, business men have learnt that it is not enough to produce technically perfect goods, but it is the market location that their rate is desided. In a sellers market, the need to ascertain the wishes and preferences of buying,

public may not have been considered. But when buyer became supreme, more and more market research is needed to keep pace with production and reliable system of distribution. Market research is equally important in the case of small industries, because their articles are tailored to suit individual or group tastes and uses. The change of taste on the part of an Indian consumer an important explonation for the fall in demand for Indian handicraft.

There is a lack of organization in the marketing of Indian cottage products. At present the foreign markets are neglected in India and even home markets are not properly found. Only big cities have government cottage industries emporia, where the products of their industries are displayed and sold, but they are not publicised by any effective media of advertisement. The arts and crafts emporiam in Lucknow and the Swadeshi Store in Bombay form a good example of a successful agency for the internal distribution of cottage industries products.

Statistical Data

Lack of adequate statistical and trade information about cottage industries is admittedly a standing

difficulty in their development. In the absence of reliable statistics regarding production, cost, labour-wages, prices, extent of market etc., it is difficult to assess their talent economic potentialities.

CHAPTER II

PHYSICAL AND CULTURAL ENVIRONMENT

Structure and Relief

The plain of Eastern Uttar Pradesh structurally forms an important part of the Gangatic- plain which lies between the Northern Penisular of India and the recently built Himaleyas.

As far as the origin of the Gangatic- plain is concerned, Edward Swess, the Australian geologist thinks that the plain was a 'fore deep' the remanentment of the Tethyan Sea, out of which the Himaleyas was uplifted, it was gradually filldup by the sediments eroded by the Himaleyan rivers and also the rivers which were coming from the penisula.

A[1] more recent view regards that this region found between the northwest drifting Indian continent in the south and the comparatively soft sediments in the Tethyan Sea as well as in the connected basin on the north. A mountain system was thus formed as a result of crumpling of sediments.

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1. Oldham, R.D., The deep boring at Lucknow, Record of the Geological Survey of India, Vol.XXIII, p.263.

Eastern Uttar Pradesh constitutes an integral part of this alluvial plain. The deposits of this plain can be divided into two categories e.g. (1) Khadar and (2) Bhangar.

The general level of the bhangar land is fifteen to seventy feet above the lowest level of the river Ganga. The bhangar land lies away from the river every where contains carbonate of small noduls of irregular shape called 'Kanker'.

The bhangar land is characterized by patches of saline and alkaline efflorescences which are the result of the gentle shape of the land and the composition of the alluvium.

The slope of the land in several parts of Eastern Uttar Pradesh is less than one feet per mile.

Drainage

The drainage pattern of this area shows a close relationship with gentle slope of the land. All the rivers of the area have a tendency to flow in zig-zag cources across the plain except the Ghaghara which flows more or less in a

straight course. The principal rivers are the Ganga, Ghaghara, Gomati, Sarju, and Tons.

The Ganga -

The Eastern Uttar Pradesh as a whole forms the drainage basin of the Ganga which receives all the principal rivers in this area. The river traverses Eastern Uttar Pradesh entering the district of Varanasi near village Prawa and flowing eastward, about 61.16 kms. At village Kalugha, it leaves this district and flows in a semi-circular course through Mirzapur district.

The Ganga receives all its tributaries except Karnasa on its left bank. The Karnasa rising in the, Kainpur hills flows along the eastern border of Varanasi and joines the Ganga at Chausa in Ghazipur district.

The Ghaghara -

The Ghaghara rises in the mountains, enters the Indian plains. The upper tributaries of the river occupy an extensive catchment are in the Himalayas and discharge a very large volume of water. On account of these secondary channels the northwestern part of Eastern Uttar Pradesh resembles a delta.

The silting of the beds of Ghaghara leads to rapid change in the course of the river from time to time. In 1901 the river split up into three minor channels in addition to a main channel and this main channel ultimately meets the Ganga.

The Sarju -

The Sarju enters the district of Azamgarh at a place about 1.60 km. northwest of the village Mehrajganj and joins one of the southerly channel of Ghaghara. Near Mau in the Azamgarh it is joined by an important tributary the Tons, which is perennial but maintains only a sluggish current of water in dry months.

The beds of Sarju after its confluence with Tons become deep and broad. The breath of the current varies from season to season.

The Gomati -

The Gomati enters Eastern Uttar Pradesh through the northwestern portion of the district of Jaunpur. At first it flows in on easterly direction and later adopts a southeasterly coast.

The bed of the river is deep. The stream has low velocity even in time of floods. During rainy season the width of the stream exceeds 3 kms. while in the hot weather it is not more than 70 metres.

Climate

The climate of Eastern Uttar Pradesh is characterised by seasonal rythm which is produced by southwest and northeast monsoons. The reversal of winds takes place regularly twice in the course of the year. In one part of the year winds are of continental origin and blow from west to east, while in the other, they are oceanic and blow from east to west. The year in eastern Uttar Pradesh is divisible into three distinct seasons:

1) The cold weather season (November to February)

2) The hot weather season (March to mid- June)

3) The season of rains (mid June to October)

The Cold Weather Season

In the month of November a high pressure belt extends from northwestern India and covers the whole of eastern Uttar Pradesh. The prevailing direction of the

winds which come from west to east is determined partly by pressure distribution and partly by trend of the Himalayan relief. The mean monthly temperature in November is 22.78 in C^{o} at Jaunpur and 19.45 in C^{o} at Varanasi. The mean maximum temperature of November at Jaunpur and Varanasi are 31.36 in C^{o} and 82 F^{o} respectively while the minimum temperatures for that month are 14.56 in C^{o} and 12.88 C^{o} respectively. The day are warm while night are cool. January is the coldest month and records the lowest temperature of the year. In these months fog, occurs at night and lasts till early morning.

On the whole, the cold weather season is characterized by clear sky, fine weather, low humidity and a large diuranal range of temperature.

The Hot Weather Season

The second half of the dry monsoon period includes the months of March, April, May and Ist half of June. The mean monthly temperature is 25.76 in C^{o} and 24.64 C^{o} at Jaunpur and Varanasi respectively and mean maximum temperatures are 35.28 C^{o} and 33.60 C^{o} whereas the minimum temperature at both stations is 16.24 C^{o}. The mean diurnal range of temperature is fairly high for example 6.16 C^{o} at Jaunpur and -5.6 C^{o} at Varanasi. Thus the days

are warm and the nights are cool and pleasant.

The temperature continues to rise during April, May and June. June becomes the hottest month in Eastern Uttar Pradesh till the southwest monsoon sets in.

The total rainfall during the hot weather season ranges between 2.03 cm and 3.81 cm which decreases from east to west.

The Season of Rains

The wet monsoon normally commences in these districts by the middle of June and July and August, are the rainiest months.

The mean maximum temperatures for July an 38.64 C^{o} and 33.6 C^{o} respectively in Jaunpur and Varanasi but in August it decreases.

It should be further noted that this the heavy rainfall during the rainy season usually takes the form of down-pours, as a consequence of which the run off is great in proportion to the quantity of rainfall. This naturaly causes flooding of the drainage channels.

Soil

According to the information available in the 'Settlement Reports', the soils of the area under study are divided into different categories on the basis of texture, colour, availability of water and level of lands. The soil map of India prepared from time to time by various authorities gives only a general feature of the soil of Eastern Uttar Pradesh.

The soil of Eastern Uttar Pradesh is alluvial and an geological basis falls in two divisions: (i) the new alluvium (khadar) and (ii) old alluvium (Bhangar).

The newer alluvial is known as khadar and the older as Bhangar. The khadar lands are found in narrow strips along the rivers Ghaghara, Ganga and Sarju and their soils vary in texture from sand to silty sand. The Bhangar soil varies from sandy loam to stiff clay depending upon topography and drainage.

Khadar Soils

The soil of the khadar is markedly sandy adjacent to the river banks, but away from these banks it improves

in texture and shows an increase in percentage of silt. The sandy soil is utilized for the cultivation of millet and kharif pulses. Silty soil is used for millet in kharif and barley or gram in rabi.

Bhangar Soils

I. Loamy Soil (Domat)

In the well-draind parts of Uttar Pradesh the dominent soil is loamy. The surface soil is yellow to brown in colour with a sub-soil which is brownish yellow, indicating good drainage, owing to the open and light texture of the soil, its water detention capacity is low but if irrigation facilities are available, it is capable of producing good crops.

II. Clayey Loam (Matiyar)

The Matiyar soil has grey or yellowish grey colour at the surface which in the lower horizons deepens to a dark grey colour. As compared to the domat soil, it is rich in clay and its water retention capacity is high.

III. Clayey (Dhankar)

The colour of dhankar soil is grey to dark grey. It has a compact and cloddy structure and becomes sticky

when wet and very hot when dry. The soil as its local name indicate is largely given to the cultivation of transplanted rice.

IV. Black Clay (Karial)

The karial soil is black in colour predominantaly clayey in texture and black like the Indian Black Cotton Soil. Its moisture retaining capacity is large, ploughing and sowing are almost impossible in a dry karail soil and irrigation is impracticable.

Population

There is a considerable correlation between the major distributional pattern of population and geographical features of the area. This becomes apparent when one compares the maps depicting environmental condition with those of density and distribution of population. This is not only true in the present case but equally true in respect of other parts of the world.

Uttar Pradesh is an agricultural state, and about 75 per cent of the total working population depends upon agriculture.[1]

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1. Census of India, 1971.

Generally speaking population is densely agglomerated in regions which are agriculturally favoured, having a high percentage of culturalable lands, good rainfall, irrigation facilities and plain topography. Because of an agricultural based economy, water appears to hold the key to the distribution of population and in creating congestion and concentration in areas which are specially suitable from this point of view.

In Eastern Uttar Pradesh, it is the rainfall (about 120 cm. per annum) that justifies the high concentration of population, although the percentage of irrigated area is low.[1] From the foregoing account, it is clear that water, soil, topography and climate have been greatly responsible in evolving the density pattern in the area.

According to 1971 census the total population of Eastern Uttar Pradesh, comprising the districts of Azamgarh, Ballia, Ghazipur, Jaunpur and Varanasi, is 10,835,966.[2] This population covers an area of 21,439 sq.km.

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1. Census of India, 1971.
2. op. cit, 1971.

The density of this area is higher than the density of the state (300 persons per sq. km.). All the districts of this area have a little more than 400 persons per sq. km. with a higher density of 560 in Varanasi and lower density of 453 in Ghazipur. This over all high density reflicts upon the isotropic nature of the plain, suitability of homogeneously diffused habitable condition, fertility of the soil, drainage condition, water resources through wells and boring, high percentage of arable lands and generally good conditions for making living out of the local and regional resources.

Rural Density -

Uttar Pradesh being pre-dominently an agricultural state, the bulk of its population lives in villages and the range of variation in rural density of the five districts of the area is between 954 (Ballia) and 749 (Varanasi). While the range in the case of urban density has between 251 (Varanasi) and 45 (Ghazipur). The area under study has a higher density as compared to state's average. In all the five districts there are 16,238 villages, most of which are of a very small size, having less than 500 persons. The great bulk of the rural population lives in the villages with a population of less than 500.

The predominant group is that of 500 - 999 persons. Big villages of over 10,000 population are rare and accommodate only 0.09 per cent of the total population of the villages. The group of 5,000 to 10,000 is more prevalent than that of 10,000 and above.

In this area the most prominant group is of the size (200 - 499) persons because all the districts viz., Azamgarh, Jaunpur, Ballia, Ghazipur and Varanasi have poor irrigation facilities. There seems to be a close correspondence between the different means of irrigation, e.g. Western Uttar Pradesh which can obviously serve a large population, through cannal and tubewell irrigation has bigger villages, whereas Eastern Uttar Pradesh depending generally upon well irrigation abounds in small villages.

Urban Density -

Urbanization in Eastern Uttar Pradesh has been rather slow and only 12.8 per cent of the total population of the area lives in towns.[1] This does reflect the backwordness of Eastern Uttar Pradesh in the sphere of industrializations.

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1. Census of India, 1971.

Urbanization has passed through various stages of oscillation chiefly because of the increase and decrease in the number of towns due to the revision of the definition of urban population in different census years. In the early decades, 1901-1911 and 1911-1921, there was steady decrease in the urban population,but thereafter it has been increasing slowly and steadily. In 1951-1961, again a dicline in the increase of population was experienced due to the changed definition of urban population. At the present moment the districts of Eastern Uttar Pradesh are at the lowest level of urbanizations.

Occupational Structure

In the census of India 1971, occupation has been classified into nine broad categries:

(I) Cultivation, (II) Agricultural labour (III) Livestock, forest-tree, fishing, hunting and plantation, orchard and allied activities (IV) Mining and quarrying (V) House hold industries and other than house hold industry (VI) Construction works (VII) Trade and commerce (VIII) Transport, storage and cummunication (IX) Services. The combination of Ist four categories constitutes primary occupation, the middle two together form secondary

occupation and the last three belong to tertiary occupation.

Primary Occupation

Primary occupations are by far the most dominant in Eastern Uttar Pradesh. Among the districts of Azamgarh, Ballia, Jaunpur, Ghazipur and Varanasi the percentage of persons pursuing primary occupation ranges between 59 and 84 per cent. Azamgarh, Jaunpur, Ballia and Ghazipur are the districts which have more than 70 per cent of their working population engaged in primary occupation whereas Varanasi is at the bottom of the scale with 59.2 per cent. Table I shows that cultivation is the most conspicuous constituent of the primary group and accounts for 48.5 per cent of the total workers in the area.

The pattern of distribution of agricultural labour is different. Ballia, Ghazipur, Azamgarh, Varanasi and Jaunpur districts stand out boldly for having the relatively highest proportion of agricultural labourers amounting to 39.8 per cent, 30.51 per cent, 27.9 per cent, 25.1 per cent, 23.8 per cent respectively. Livestock raising, forestry and mining etc. are generally negligible in the area.

Secondary Occupation

Though the proportion of workers in secondary occupation lies between 6 and 20 per cent, Varanasi tops the list of the five districts having 19.2 per cent of its working population engaged in secondary occupation, because this district is relatively more advanced in industrial development.

The pattern of the distribution of workers in house-hold and manufacturing industries is quite different. That the range of variation (between 3 and 11 per cent) in the proportion of workers in house-hold industries is notably high whereas in other industries it is considerably small. These types of industrial activities are the two most significant components of secondary occupation.

An other secondary occupation relates to building and construction work. However in comparative terms, it is much less significant then manufacturing industries. The percentage in construction work ranges between 0.2 and 0.8 per cent in the area but it differs from rural to urban area. In rural area it ranges between 0.1 and 0.6 per cent, while in the urban area it is between 1 and 3 per cent. In urban areas, Jaunpur has the highest concentrati

of workers in construction work amounting to 2.25 per cent while Azamgarh has the lowest concentration with 1.23 per cent. There is more variation in the urban and rural workers engaged in construction works.

Tertiary Occupation

Tertiary occupations are more evenly distributed in the districts of Azamgarh, Ballia, Jaunpur and Ghazipur except Varanasi. Amongs the four districts the percentage of workers engaged in tertiary occupations ranges between 8 and 10, while in Varanasi district it is 21.6 per cent of this working population.

Varanasi, Jaunpur, Ballia, Ghazipur and Azamgarh have some what compareable percentage, in trade and commerce, but it appears that transport and communication are not developed extensively in Eastern Uttar Pradesh as they claim only 1.2 percentage of the total workers in the area with a maximum of 3.6 per cent in Varanasi.

TABLE I

Occupation Groups to total Workers (Representing Percentage)

Districts	I	II	III	IV	P.O.	V_a	V_b	VI	S.O.	VII	VIII	IX	T.O.
Azamgarh	54.4	27.9	00.4	00.1	82.8	6.95	1.78	00.2	9.00	2.6	00.4	5.2	8.2
Jaunpur	59.8	23.8	00.3	00.0	83.9	3.74	2.13	00.3	6.20	3.80	00.8	5.3	9.9
Ballia	43.58	38.80	00.61	00.04	83.03	4.31	1.61	00.3	6.2	3.4	00.7	6.7	10.8
Ghazipur	51.51	30.51	00.58	00.03	82.63	4.51	1.69	00.3	6.23	3.1	00.5	7.20	10.8
Varansi	33.3	25.1	00.80	00.00	59.2	11.00	6.18	00.8	19.2	6.6	3.6	11.4	21.6

P.O.- Primary Occupation, S.O.-Secondary Occupation, T.O.- Tertiary Occupation.

CHAPTER III

COTTAGE INDUSTRIES AND RURAL ECONOMY

The unemployment and under-employment are the prevailing economic drawbacks in the developing and underdeveloped countries of the world more particularly in Asia. India which is an integral part of Asia experiences this drawback on a large scale. On analysis it seems obvious that unemployment and underemployment both are the result of a fundamentally disproportionate relationship between population and the use of available land and other resources. Unprecedented population growth specially within the second half of the current century has led to a situation in which there are far too many people engaged in agriculture. The situation is further aggravated by an outdated system of land tenures, poor standard of health and nutrition, the continuance of primitive and inefficient techniques of agriculture on small un-economic holdings and unexhilarating climate which combined with traditionally fatalistic outlook on life tends to undermine efforts in favour of economic betterment. In addition, there is absence of other avenues of employment. Unless a balance is struck between available labour and employment opportunities, the standard of living of the entire

population will deteriorate further.

Underemployment is generally classified into seasonal and chronic. Seasonal employment of worker in agricultural activities is largely dependent on the rain and manpower is required at the time of sowing and harvesting. Chronic employment refers to a redundance of labour on the land in terms of producing existing volume of agricultural output with the existing method of production and organisation.

Among the classical remedies suggested for lackling the problem of poverty and underemployment, large scale industrialisation is perhaps the most important. Industrialisation results in a phenomenal increase in the job opportunities, consequently rapid improvement in the standard of living and in lowering down the rate of population growth. But in India large scale industrialisation has been slow particularly for want of supply of capital which is a vital factor.

The rate of capital formation is very slow. The poverty of rural population has limited the extent of the effective demand on which alone large scale industries thrive. It should not be forgotten that one of the factors

which contributed to the industrial revolution in Europe was a parallel agricultural revolution involving a transition from subsistence to commercial forming and the production of abandant cheap food for an industrial labour. In India there is as yet little evidence of such a change in agriculture and food products. The rate of output is so low that food constitutes an important item in the budget of the average industrial worker. Under these conditions large scale industry has been slow to develop and has succeeded to a very limited extent in absorving the surplus population of the country side.

Under the circumstances, the problem of unemployment and underemployment can be tackled by the expansion and modernisation of the existing small scale and cottage industries and the introduction of new industries capable of raising the level of production and improving the present low standerd of living. Cottage industries, apart from agriculture, still constitute the most extensive occupation of people in India. Cottage industries have an important place in Indian economy. Their place should be determined by the extent to which they are economic and produce commodities so cheap as to compete with similar goods produced by the alternative methods of production. This

indicates great scope for these industries but distributed both in rural and urban areas, they may help to meet a variety of essential needs connected with agriculture, housing transport, and the demands of every day life. It does not require much argument to show that cottage industries provide employment for a very important section of population and also make a vital contribution in maintaining the presents level of living of the agricultural population. They have no doubt suffered a decline both through the competition with large scale industries as well as through the depressing effect of population growth. The decline is expressed in the various ways. The rural craftmen may retreat entirely from the work, thereby increasing rural unemployment. The urban craftsmen may have no alternative but to accept lower wages or longer hours of work to keep themselves alive. Surveys of 33 centres in the State of Madras, Maharashtra, Gujarat, and West Bengal have revealed that between 1928 and 1941 earning among them fell to the tune of 50 per cent. Due to ignorance, illeteracy, lack of resources and the restriction of a traditionally rigid society, their income has gone down, but despite this, as the agriculture is the main occupation of people, cottage industries have still persisted. At the same time many industries and skills have disappeared on

account of competition from better organised large scale industries and this process is bound to continue unless the existing cottage industries are revitalised and modernised.

The bulk of population in this area lives in rural surroundings. There is little evidence to show that the surplus population of this area can be absorbed in large scale industries. Urbanisation is making little progress. Large scale industries cannot move to rural areas for obvious reasons. Our anxiety is to raise the productivity among all the major sectors of the population. We have, therefore, to tackle the problem of rural population in its own environment. Our endeavour should therefore be to make the maximum use of manpower and resources available in the rural areas.

Cottage industries are labour employing and are capable of creating more employment. However the per capita output may be less but in the present circumstances it is most desirable to provide employment to more persons even at lower levels of productions.

In countries like Switzerland, Germany and France, there exists today a large group of small scale industrial workshops and units side by side with the large factories.

Japan furnishes the most striking example of the survival and growth of small scale industries. With such an economy, and the efforts made by her people it has become one of the leading industrial powers in the world.

This sector can not be ignored in national plans for economic development because it represents a very important and vital part of the economy. It is next only to agriculture in terms of manpower. Although their techniquees may be old fashioned and equipment primitive or inefficient. Yet they have all required training and experience in production and in view of the overall shortage of trained personnel it would be short sighted to over look and talents. Such skills and crafts have been handed down from generation to generation, and in view of the present limited employment and training opportunities available, these skills and crafts will continue to be practiced as long as living can be obtained from them. To ignore this important source of available skill would amount to a wastage of valuable assets.

We must have the common man in view. Our aim should be to devise methods by which he can be employed. This is the best means for increasing his standard of living.

In the past the Indian villages were usually self-sufficient and self-dependent. They produced most of the articles of necessity for the village people, and had a certain number of artisans - Blacksmiths, carpenter, oilmen, porter etc., to make new articles and repair old ones.

Some of the village craftsmen produced commodities of special types, those of metal, embroidery, carpet, cotton prints etc. Through the training of several generations the work of our artisans had attained the high degree of perfection. This ingenuity of craftsmanship had attracted a large number of admiress all over the world. To quote the Industrial Commission, "At a time when the west of Europe, the birth place of modern industrial system was inhabited by uncivilised people, India was famous for the wealth of her rural and for the high artistic skills of her craftsmen".[1]

The development of modern industrial enterprises and imports have undoubtedly harmed the interest of our cottage industries, but these have survived because they are firmly established in the rural environments. Artisans produced commodities which are in demands, and have not

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1. Report of Industrial Commission, 1918, p.11.

thus been displaced by factory-make goods. In addition, they work under conditions which they prefer to the factory life.

Our cottage industries provide employment to a large number of rural population. They occupy an important position in the rural economy of the area. In view of this fact, the central as well as the state governments in the Five Year Plans gave special place to develop cottage industries at different levels.

The significance of cottage industries has been emphesized by several committees and commissions, but a systematic approach was made only when the late Mahatma Gandhi launched the Swedeshi Movement. He visualised that village uplift was possible only with the development of cottage industries which would play a dominant role in the rejuvenation of village life. Cottage industries provide subsidiary occupation to the villagers. There is an urgent need for their full employment. Studies made by certain authorities and investigation conducted by different committees have revealed that the Indian cultivators are occupied from 150 to 200 days in a year in agricultural activity and the all the members of peasant families can not be fully employed even during a busy agricultural season

on account of uneconomic holdings. The Uttar Pradesh Cottage Industries Sub-Committees wrote that the only way to fight the monster of unemployment in the rural areas is the development of cottage and small scale industries. The problem is to devise the best means for providing employment and occupation to the vast rural population which remains idle during the off-season of agriculture.[1]

Cottage industries increase the low earning of the cultivators who have been growning under the yoke of grinding poverty. The National Planning Committee, 1938 reported that large number of people living in the rural areas were unable to produce sufficient food, clothing and other requirements of a healthy and decent living and a large proportion of them were in a state of constant want, semi-starvation, and economic insecurity. There is no doubt that the per capita income of the Indian cultivator estimated in 1938 by Dr.Radha Kamal Mukerjee at Rs.42/- which increased to 421.50 Rs. in 1964-65.

The Indian economy has been adversely affected several times by famines and food shortages. Under such conditions it becomes very difficult for the masses to

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1. Report of Uttar Pradesh Cottage Industries Sub-Committee 1950, p.4.

acquire more purchasing power. For eradicating the menace of famines, the Famine Enquiry Commission recommended the ruralization of industries. When severe famine broke out throughout India in 1896, The Indian National Congress laid great emphasis on the development of indigenous and local industries but the scheme did not make much progress.

Industrialism as conceived in the west undoubtedly represents an enormous increase in scientific and technologica knowledge but they encourage migration of rural population to urban centres on account of heavy pressure of population on lond. Over urbanisation has created the evils of congection overcrowding, insanitation, shortage of accommodation etc. in industrial towns and cities. According to Mr.Grigg, urbanisation separates the producer of food from the consumer.[1]

These evils can be minimized to a great extent by the gradual diversification and development of rural industries. The agro-industrial base would certainly strengthen our agricultural economy. The khadi and other village industries seem to be the most effective ways for creating the moral strength and power that will strengthen

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1. Grigg, R.B., Which Ways lies Hope, p.46.
Agricultural Economic and Cooperation, p.450.

the country, and help change the beneficiaries of real wealth from cities to rural areas, from minority to majority, from rich to the poor, from the exploiter of the soil to the friends and guardians of the soil.[1] The Indian villagers are mostly of stay athome nature, when work is carried on in the home of the cultivator, his family members help him in the work. The collaboration of all the family members not only economises but also increases the rate of production. Culture and refinement come easily to the artisan through his work amidst his kith and kin.

People in the rural areas constitute about 80 per cent of the population. There are 16,238 villages in the area out of which 13,595 villages have a population of less than 1000 persons each. To be precise, 9,752 villages have a population of less than 500 each while 3,843 villages are inhabited by less than 200 persons each. All this shows that our economy is basically a rural one and there is no balancing between our agriculture and industries. While 70 per cent labour force depends upon agriculture only 10.55 per cent depends upon industry (Fig.2). When industries develop in cities and towns only capitalist

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1. Grigg, R.B., A Philosophy of Indian Economic Development, p.161
Agriculture Economics and Cooperation, p.450.

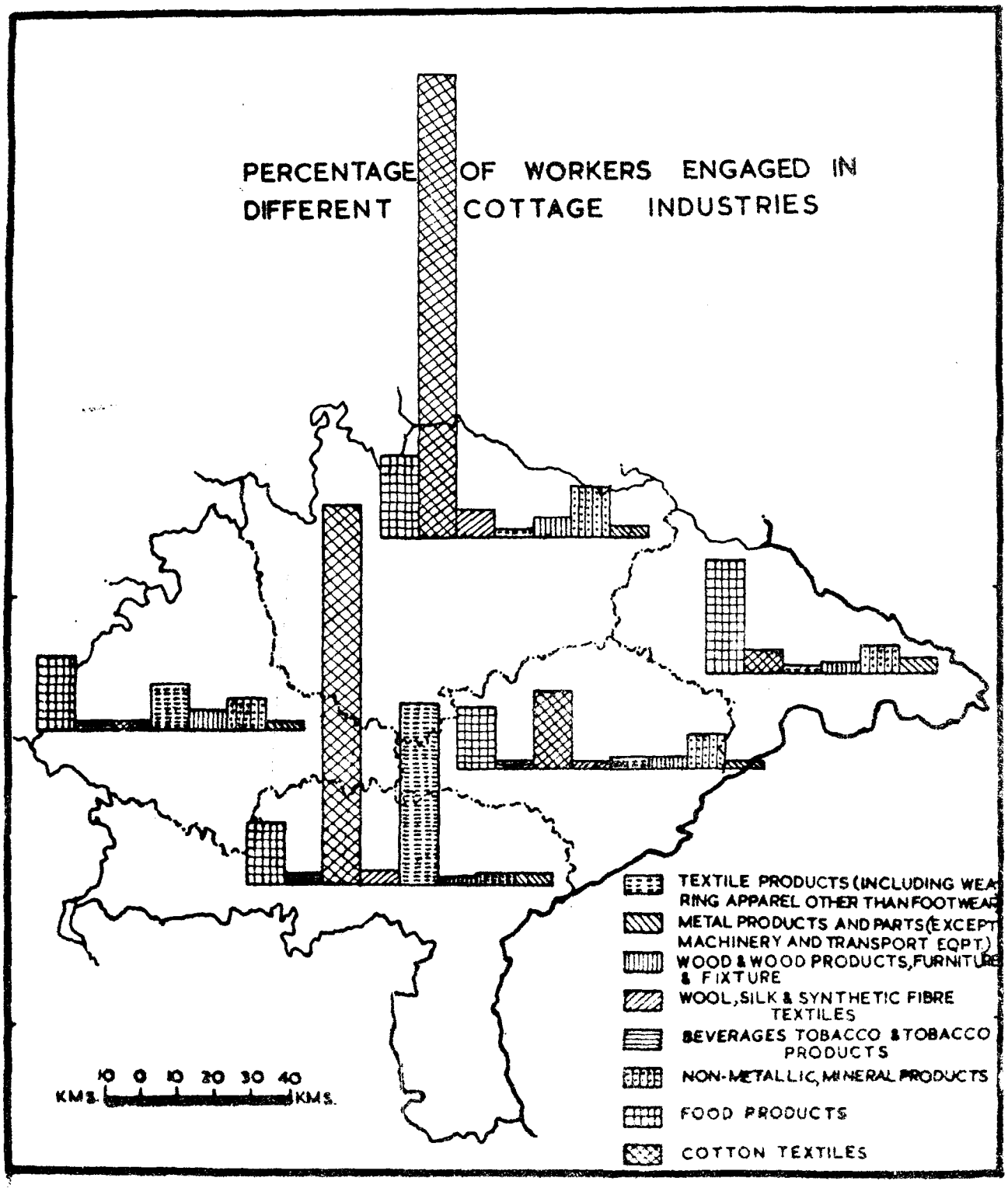
PERCENTAGE OF WORKERS ENGAGED IN DIFFERENT COTTAGE INDUSTRIES
10 0 10 20 30 40
KMS. KMS.
TEXTILE PRODUCTS (INCLUDING WEA
RING APPAREL OTHER THAN FOOTWEAR
METAL PRODUCTS AND PARTS (EXCEPT
MACHINERY AND TRANSPORT EQPT.)
WOOD & WOOD PRODUCTS, FURNITURE
& FIXTURE
WOOL, SILK & SYNTHETIC FIBRE
TEXTILES
BEVERAGES TOBACCO & TOBACCO
PRODUCTS
NON-METALLIC, MINERAL PRODUCTS
FOOD PRODUCTS
COTTON TEXTILES

Fig. NO. 2.

benefits, but the villagers have nothing to gain. Hence ruralisation of industries might help solve the problem in the form of distributing the national income more equtably, establishing justice between the rich and the poor as between towns and villages making the adjustment of incomes possible.

Cottage industries offer opportunities for the development of inherent talents and aptitudes of rural workers, which calls for a congenial atmosphere. Talents and qualities cannot develop in a factory where thousands of workers participate in the productive process. These are best developed in the homely atmosphere of cottage industries only.

It has been calculated that working man in the rural areas requires an intake of 2500 calories approximate per head per day but it is pity that the diet of an average Indian is deficient not only in calories but also in proteins and vitamins. The development of certain village industries will improve the nutritional standard of diet. For example hand pounded rice will increase the quantity of phosphorus and vitamin B. It is of interest to note that phosphorus content of rice decline with polishing. Similarly mill ground floor loses vitamins.

It becomes poisonous if kept for many days. Jaggery is better in nutritional value than refined sugar, but with the expansion of sugar industry, jaggery is becoming a thing of the past.

It is gratifying to note that palm are abundance in this area, and palm molasses are rich in many essential food materials including mineral and vitamins. Likewise honey possesses a great nutritional and medicinal value. Thus the development of hand- paunded rice, gur and khandsari, palm gur and bee-keeping industries will considerably remove malnutrition from the rural area.

The agricultural community is suffering in two ways viz.; (i) the increasing pressure on land and increase in unemployment due to the lack of subsidiary occupations. Under these circumstances, we cannot pin our faith on industrialisation or mechanisation as a means of solving the problem of unemployment and relieving the pressure of population on land.

In Western countries the problem of underemployment and poverty have been tackled on the basis of classical remedies, such as large scale industrialisation which necessitated the consequent shift of population from rural

to urban areas. The phenomenal progress made by Japan in the rural economy has demonstrated beyond doubt that unemployment and shifting of population in rural areas may be solved through the development of small scale and cottage industries.

As it has been already pointed out that the basic problem of our national economy is that of unemployment which is growing in volume and intensity day by day but experience of western countries does not at all convince us that we can solve our problem merely by large scale production, intensification of mechanisation and finally rationalization. Till recently a few nations enjoyed a virtual monopoly of the use of machinery but that monopoly is now broken which has resulted in over productiorf and consequent scramble for more markets. A stage has now been reached when it is not possible to exploit the raw materials of other countries, in view of the fact that self-sufficiency has become the slogan of the day. Under these circumstances we have to make provision for the employment of the labour force of the country in such a way as to bring an equitable distribution of wealth. This can be done only by resuscitation of cottage industries. Cottage industries provide employment to the worker in their

own homes, and their decentralized character has several advantages which have become patent in the case of India specially in the Eastern Uttar Pradesh. They, indeed, offer opportunities for profitable employment and development of inherent skill and talent in occupations congenial to them. Their authentic claims can not be disputed by anyone. Further, the increasing employment of the rural masses lead to an increase in their purchasing power, which at present, is confined only to urban areas. Cottage industries should survive on grounds of social welfare since they distribute wealth.

The All India Spinners and Village Industries Association did much useful work in resuscitating village industries which are of wide application, require a little capital and are capable of being tackled by the villagers without outside help. Taking the example of food, The All India Village Industries Association had shown that if paddy husking and flour grinding are developed at cottage industries level people can be assured of not only nutritive food but also food supply can be augmented because rice loses much of its nutritive value when it is milled and polished. Similarly palm, gur, and oil etc. may be produced on cottage basis. In the case of oil pressing,

if it is done on cottage basis, we can get nutritive oil and give oilcake to the cattle. Village oilman can also be assured of employment and oil can be usef for the manufacture of soap, paints varnishes etc.

Thus our industrial future depends on the resuscitation of cottage industries which alone can give increasing opportunity of employment to our unemployed rural population. Let it not be forgotten that utilisation of labour saving machinery was an economic necessity in the case of Western Countries. Mahatama Gandhi once remarked that mechanisation is good when the hands are too few for the work intended to be accomplished. It is an evil when there are more hands than required for the work as in India. The problem, therefore with us is labour absorbing and not labour saving machinery.[1] It is therefore desirable that cottage industries should survive as the corner stone of a healthy decentralised modern economy which will help our teeming millions to maintain a reasonable standard of life and this can be done only if we have the will to tackle the problem.

It is really a good sign of the time that we have begun to realise that in a large country like ours with a

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1. Rov, R.V., Cottage and Small Scale Industries and Planned Economy, Delhi 6, p.29.

large agricultural population, there is a great scope for cottage industries in rural areas and steps have already been taken by the Central and the State Governments to find out ways and means for improving the economy of the rural areas.

Cottage industries have a very important role in the national economy, offering as they do, scope for individual, village or cooperative enterprises and the means for rehabilitation of displaced persons. Such industries which are particularly suited for the better utilisation of local resources and for the achievement of local self-sufficiency in respect of certain types of essential consumer goods, should be developed.

CHAPTER IV

LOCATIONAL FACTORS OF SOME IMPORTANT COTTAGE INDUSTRIES

A detailed study of the available literature on the location of industries gives an idea about the development of the concept of locational theories. It was Thunen who for the first time attempted to present a theory of location, but his conclusions lacked a general applicability due to the limitation of his assumptions. The most significant contribution that has been to the theory of location is by Alfred Weber, a German Economist.[1]

He adopts a purely deductive method and discovers the operation of certain general factors, which influence the location of manufacturing industries. Weber attempts to determine at the outset the forces that operate as economic causes of location through a process of cost analysis. He arrives at certain elements of cost which vary geographically and others which do not. It is only the geographically determined difference of cost that can influence the location. Hence he overlooks the others and

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1. Weber, A., Theory of Location of Industries 1907, translated in English by C.J.Friedrich (Chicago 1929).

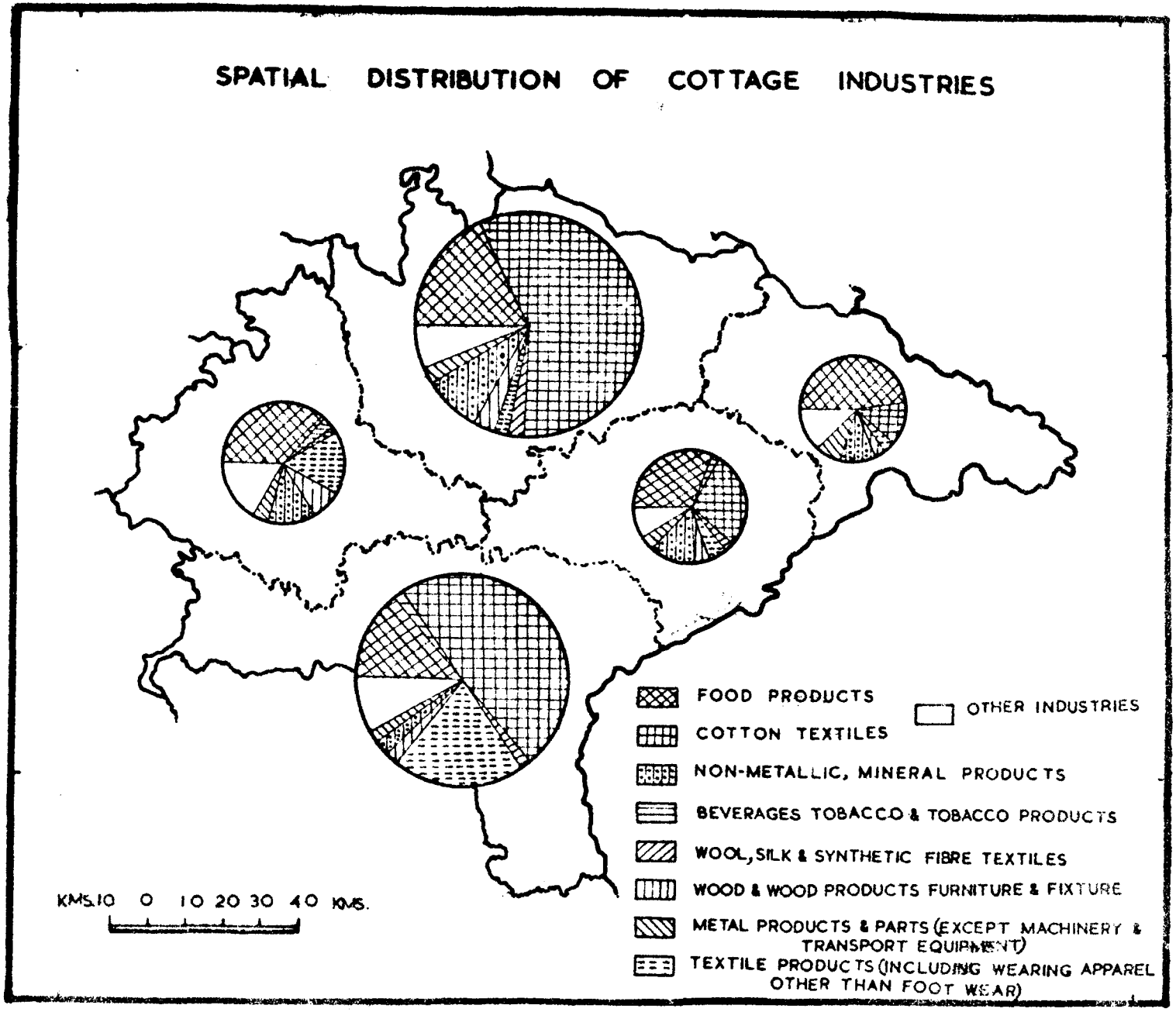
SPATIAL DISTRIBUTION OF COTTAGE INDUSTRIES
FOOD PRODUCTS
COTTON TEXTILES
NON-METALLIC, MINERAL PRODUCTS
BEVERAGES TOBACCO & TOBACCO PRODUCTS
WOOL, SILK & SYNTHETIC FIBRE TEXTILES
WOOD & WOOD PRODUCTS FURNITURE & FIXTURE
METAL PRODUCTS & PARTS (EXCEPT MACHINERY & TRANSPORT EQUIPMENT)
TEXTILE PRODUCTS (INCLUDING WEARING APPAREL OTHER THAN FOOT WEAR)
OTHER INDUSTRIES
KMS.10 0 10 20 30 40 KMS.

Fig. NO.3.

selects only three forces as general regional factors of location, namely, the cost of raw material, of labour and of transportation. Since difference in the cost of material is caused by the distance over which they have to be transported, they could also be expressed in terms of transportation cost. Thus ultimately there remain two general regional factors, namely cost of transportation and of labour. All the other elements of cost which have no regional significance can yield benefits through an agglomeration of industries. Hence the general pattern of location will be at the optimal point of transportation cost. Any deviation from such a point of orientation may be caused either by the differences in the cost of labour in other regions or by the advantages of agglomeration at particular centre.

The basic elements of cost of transportation are the weight to be transported and the distance to be covered. It is no doubt a fact that the process of rate making is influenced by the type of transportation system, the nature of road-bed and the quality of goods. But still in its ultimate analysis it is an expression of the two predominant factors of weight and distance that matter. Hence there is no real danger of distorting the picture of reality by

an obstruction of this nature. Obviously industries would tend to locate themselves at places where total transportation cost is at their minimum.

Deviation from points of least transportation cost may be caused by more favourable labour locations, as much as labour cost vary from place to place, a change of location may take place if the additional transport cost is more than compensated by the economy in the expenses for labour. The extent to which labour deviations may occur depends upon the index of labour which is in other words the proportion of labour embodied in the product. But the actual deviating force is provided by labour coefficient which is the proportion of labour cost per ten of weight to be moved of the localised material. Another form of deviation from a minimum transportation point may be caused by the advantage of agglomeration. If the economies are concentrated, and production are over-whelming location will be at points of agglomeration rather than at places of low level cost. But all industries will not react to this tendency with equal vigour. It depends upon the coefficient of manufacture which is the value added through manufacture per ton of weight to be moved. Hence industries with high coefficient of manufacture show strong

tendencies to agglomerate and those with low coefficient of manufacture show weak tendencies to agglomerate.

After Weber the important contribution was made by Edgar Hoover[1] in this connection. He, besides, introducing factor like market, raw material, labour, efforts to minimise transport cost of industry, transport service, capital, and local industrial structure emphasizes that transportation cost and other costs influence locational decisions.

In 1954, another major contribution towards location theory by Losch[2] came into light. He instead of least cost location emphasized that industries locate where profits are maximum and total revenue exceeds total cost by the greatest amount. He also introduced the inter-dependence of industries.

W.Isard in 1956, embraced all aspects of space economy while introducing the theory of location and space economy[3]. Isard attempts the location on the basis of substitution principle, for example to what extent labour can be substituted for capital, land and vice versa. He

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1. Hoover, E., The Location of Economic Activities, New York, 1948.
2. Losch, A., The Economic of Location (New Haven 1954).
3. Isard, W., Location and Space Economy (Cambridge, Mass 1956).

mentions transport inputs as an important aspect in the location of production centres. He therefore mentions material oriented industries, market oriented industries and economies of localization and urbanization to bring about agglomeration.

D.M. Smith[1] is the sole contributor of a theoretical framework for geographical studies of industrial location. He follows the least cost approach with demand and price holding constant. As a general rule, the factor or factors making up relatively large spatial cost variations are only likely to have the greatest influence on variation in total cost and thus on location. He illustrates the industrial location influenced by the spatial variation in cost by a simple hypothetical locational model. He further introduced that the effects of differences in entrepreneurial skill subside and external economics elements of chance, and purely personel factors play their role in locational decisions.

In locating the industries the problem may involve finding the most desirable site. The problem of locating the smaller establishment is less complicated them the

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1. Smith, D.M., A Theoretical Framework for Geographical Studies of Industrial Location, Economic Geography, Vol.42, No.2, April 1966.

selection of location for large establishment. The larger establishments generally invest large sums of money as compared to smaller establishment. Therefore, smaller establishments are in an advantageous position in the sense that they can shift to the most desirable spot in the case of wrong choice.

Before the process of selection begins, attention must be given to the relative importance of each location factors. Evaluating the general area in which to locate there are several factors that merit consideration. For some businessmen each is of vital importance, but in other cases only a few of these factors may apply.

Raw Material

Raw material can be described as the material gifts of nature viz., various vegetable, animal and mineral products in their crude natural form.[1] The distinction between raw material and finished goods lies in the fact that in the former case, human skills and energy play no direct part while in the latter their properties and form depend upon human skills and energy. In the industrial

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1. Soni, H.R., Indian Industries and its problem, London, 1932, Vol.1, p.39.

sector a different type of distinction is made. The status of an article is determined by the intention of the consumer and by the nature of the part the article is expected to play in the scheme of manufacture. Raw materials take two forms viz., (i) agricultural produce (ii) industrial raw material. Agricultural produce after some processing may also become industrial raw material. Thus finished product of one manufacture may become raw material of another manufacture.

Primary raw material may be roughly divided into three main groups: vegetable products, animal products and minerals. Vegetable products may be sub-divided into (a) agricultural and (b) forest products, while minerals are generally classified into those belonging to metallic and non-metallic groups.

The availability of raw material is one of the major locational factors contributing to the establishment of industries. There are instances where perishable raw materials or at least less perishable products, for example cheese, are made at the dairies in which the contributing factor is milk that is used.

If the material loses greatly in weight or bulk in the process of manufacturing, it will cause the industry

to be attracted to the point of material production e.g. Iron and Steel Industry. During the process of steel production coal is burnt to ashes. Thus coal is termed as weight losing factor. Iron on the other hand is a weight earning factor. While planning the use of raw material wisdom lies in the fact that the weight losing factor be utilised at the point of origin and the weight earning factor be transported to join the weight losing factor in the productive process. The industrial unit should be so localized that transport cost are reduced to the minimum. The industry tends to be attracted to the source of raw material. The example of "Khandsari Plant" is an excellent example because it is found where sugarcane is sown on large scale. The location of industries may be affected by other considerations notably the structure of freight rate charges by the possibility of a by-product arising out of the process, the disposal of which may effect the initial location decision and by the economies to be gained by the integration with other processes which have different location requirement.

For such reasons much industry is now-a-days less seriously effected in the location of its material. It is clear that material procurement cost remains sifnificant as

a locating factor in some important industrial processes. Among these are the certain industries engaged in the processing of the produce of extractive industries where much difficulties of bulk waste content or perishability are to be faced.

The control over the industrial location by raw material may be stated as follows "Nearness to raw materials tends to be the locative factor for all manufacturing industries which are perishable or highly condensable raw materials".[1]

Raw materials may be either "ubiquities" or "localized" material. Ubiquities like brick clay and water are available everywhere, wheareas localized materials like cotton and minerals are confined to certain regions. Evedently the latter exert a greater influence on the location of the industry than the farmer; further, the localized material may be have in the process of production either as pure material or as gross materials. A pure material imparts its total weight to the final product. On the other hand, a gross material may either add none of its weights to the products, or add only a part of it. Coal

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1. Ranner, George T., Geography of Industrial Localization, Economic Geography, Vol.22, 1947, p.167.

for instance adds none of its weight whereas iron ore add only a part of its weight to the final product. Hence the former are known as weight losing material. The nature of transformation of the materials is of great importance in determining the location of industries because the total weight to be transported depends upon it.

Market

Every businessman must consider the market from which he plans to derive his income when he locates his establishments. The small businessman usually approaches the problem of location by first fixing up a given area within a certain radius from his home; he then redifines the problem of location by asking "where within this defined area, after laking all relevant factors into consideration, is the ideal spot for my business"?

The individual and his product both are the factors which determine the success of small establishment. If a small businessman is the manufacturer of a product used by other business, he perhaps has a dozen or so customer, located within rather limited distance from his shop. These few costomers will comprise his market. The small manufacturer finds that he can satisfy his market whether located close

to or far from his shop because of adequate transport and communication facilities. His customers are more interested in the total service that this businessman offers than in the single factor of immediate accessibility. Industries producing consumer goods, however, are interested where large number of potential customers are found.

The attraction of market location has become of great significance for many modern industries. Among these industries are some in which the cost of moving the product to its market forms a high percentage of total cost. The movement of the product to the consumer is costlier than movement of material to the factory. It may therefore become desirable to locate as near as possible to the customers who may be either the final consumer of the product or other industries. For such industries the attraction of the market, is made effective to a considerable extent through transfer cost. In the bakery processes, there is also an increase of weight, bulk and perishability for which reasons among others, bakery are strongly market-oriented. In eastern Uttar Pradesh most of food processing industries are located in towns, "Nearness to the market tends to be a prime requisite for all fabricative or manufactured enter prises".

(a) Where the original materials are markedly increased in bulk or weight.

(b) Where the processing creates a fragile or perishable product.

(c) Where the product is subject to rapid changes in style, design, technological character or popular interest".[1]

Labour

No business can prosper unless it can obtain and maintain a productive labour force. Inspite of the developments in modern machinery, which in many instances reduced the importance of skilled labour, no process has been developed to operate without manpower. The key to success in any business organisation is the human factor- workers can make or destroy any organisation. Under certain conditions supply of labour may act as the locational factor for manufacturing industries.

In considering labour, management faces three problems: firstly, the quality of labour available in a given area. Secondly, the quality of this labour and finally the cost of labour in the area. In concerns of

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1. Ranner George T., Geography of Industrial Location, Economic Geography, Vol.23, 1947, p.177.

man production workers can be trained cheeply and quickly, the quality of labour is not of great importance. However many businesses require workers with particular skills acquired through years of experience. Every region in this country does not have an adequate supply of workers who possess the specific skill that management needs for efficient operation. If management needs skilled labour at a place, it should import them from another area, train the unskilled workers to perform skilled operation. Management must weigh these alternatives carefully since the cost of labour runs high. It must also be recognised that the cost of labour possessing the same skill will vary greatly from area to area. In the beginning of a business, manager must for obvious reasons start operations only in localities where certain skills and attitude had developed. Skilled labour, behaved in a quite different manner, prior to industrial revolution when craft or artisan skill was the chief basis of success in the fabricative industries. The modern factory with its mass production machinery, assembly lines and minute division of labour requires workers with varied skill. There is need for intelligence on the part of workers. Some parts of the plain area are important producers of specialities

that have gained fame on account of particular skill and reputation of the manufacturers that have been developed over a long period of time.

In eastern Uttar Pradesh there are both skilled and unskilled workers who are engaged in cottage industries, e.g. cotton textile, in Mao and Mubarakpur, 'Zari' in Varanasi and carpet industries at Bhadoi. Cheep and mostly unskilled labour is available everywhere in the region under study.

Capital

Capital also effects the location of industry, the types, as well as the cost of production in various locations. Capital has some geographical expression which, since it influences the location of economic activities, calls for consideration here. Geographical variation in the price of capital is not necessarily of the same order or even in the same direction as variation in the price of labour. Which-ever is cheaper in any area related to any other area may, therefore, be used by skillful management to offset the disadvantages imposed by the dearer element.

Two kind of capital may be distinguished i.e. capital goods or equipment on the one hand and money capital on the other. Money capital is however much more mobile, though precise degree of mobility depends on the variety of considerations. Money capital is a commodity which like any other commodity has to be brought. The quantity available for any particular use depends on price offered. There are normally many possible outlets for investment of capital. In advanced economics 'risk capital' is usually readily available for the promotion of new enterprises or the development of promising new areas.

In general, capital is mobile and will become available at location where it can be invested at profit on an international basis. However, governmental policies may restrict the import of foreign capital and controle by foreign companies. Capital is the chief source for the localization of industries.

Transportation

Transportation as it relates to the supply of raw material to industrial centres and to market was discussed briefly in earlier pages. Some additional consideration about transportation is mentioned here. Indian

transportation system is not sufficient for our needs. The business communities must have materials to work with, when needed, and must be able to shift the goods to meet customer's requirement. The location of manufacturing industries today is not fixed by nature. There is sufficient freedom of choice in selecting a location to make transportation cost a very significant aspect of the problem.

The basic elements of cost of transportation are the weight to be transported and distance to be covered. It is no doubt a fact that the process of rate fixing is influenced by the type of transportation system, the nature of roadbed and the quality of the goods. But still in its ultimate analysis it is an expression of the two predominant factors i.e., weight and distance. Obviously industries would tend to locate themselves at places where the total transportation costs are at their minimum. Since material deposit is not always contiguous to the places of consumption, each industry has to choose for itself locational figure of least transportation cost.[1]

The eastern Uttar Pradesh suffers from inadequate communication facilities. Although inter-district

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1. Balakrishna, R., Industrial Development of Mysore , p.106, Banglore.

communication is farely well-developed, yet it needs a considerable improvement. During the monsoon season when most of the river are in spate, many rural areas remain isolated from the district and Tahsil headquarters, and transport of various commodities are suspended till the flood waters recede.

Climate

Climate is probably of little significance in these times as a factor in the location of industries that need a particular climatic environment for its manufacturing concerns. With the modern development of airconditioning, humidity controls and central heating for industry and industrial plants, climate has lost a measure of its importance as a location factor. Many industries must depend at least partly upon outdoor activities. In addition, climate as a major element of living conditions may or may not be attraction for labour.

"Agriculture is the corner stone of civilization and the basic industry of economic geography. More than any other great industry, agriculture in all its phases depends directly on climate. Other agricultural activities such as cattle raising, wheat and rice growing flourish within extensive climatic limits but upon every kind of

agricultural product, and in every agricultural region, climate exerts as its influence as favourable or unfavourable, positive or negative, strong or weak.[1]

In Indian context, however, climate still plays a dominant role in locating the cottage industries, because these industries are not in a position to utilize scientific techniques to make climate suitable for them.

Power Supply

In the days of purely household manufacturing the power used was largely man himself and the animals be tended but in some places wind served as a source of power. With the development of household and early factory types of fabrication other resources gradually came into play i.e. water power, wood and coal but power is not a very important factor for the localisation of cottage industries in eastern Uttar Pradesh.

Water Supply

Water is the source of life for human beings, animals, vegetation, and agricultural crops. The quantity of water directly used by men and animals is comparatively small but the quantity used indirectly by man for agricultural

1. Gibson, J. Sulliven, Climate a factor of economic life J. G., 1940, p.196.

purposes in the form of irrigation is very large. Water is also being increasingly used for the generation of hydroelectric power. Regarding water power resources of Uttar Pradesh this region has a less hydroelectric power potential.

Role of Government

Besides all factors discussed earlier, Government's role is a major factor of localization of industries. Previous government was fased towards the largescale productions. Although they have given some place to rural industries, they could not provide adequate protection to them. Therefore, the rural industries were unable to compete with the large scale industries. The new government at the centre whose idealogies are based on Gandhian philosophy have emphesized the development of rural industries. The Government of Uttar Pradesh has decided to evolve and implement a rural industrial policy in order to provide suitable employment opportunities to each and every village and to set the pace for economic growth. This will help rural people to be engaged in productive activities throughout the year.

The new policy unlike previous government's aims at decentralization of economic power at all level and establishment of small and village industries, as visualised

by Mahatma Gandhi, throughout the length and breath of the state. Government has also decided to give the protection to village industries sinquo-non for the development of rural industries.

To start with, the State Government have decided to setup rural growth centres which would be made the basis of decentralisation of industries. Initially 5000 such centres are proposed to be setup in the state, each covering about 15 'Gram Sabhas'. Gradually, an industrial estate would be setup in every growth centres and a cluster of industries established on the basis of locally available and readily pro-curable raw material.

Another important scheme is the establishment of industrial cooperatives, which would ensure the total industrialisation of the rural areas. The society would be provided an amount ranging from Rs. 1 lakh to Rs. 10 lakh for starting an industry. Both schemes would work under the supervision of department of Industry.

It may be mentioned here that there are three important industries in the state which could be developed and expanded on a wide scale. These are carpet, handloom and leather industries. In the realm of the carpet industry

there are at present 21 centres for imparting training to carpet weavers. These centres are being increased to 75 according to a recent decision of the state government and efforts are afoot to double this member during the next year.

For expansion of the handloom sector, eight spinning mills have been setup in the public sector for providing yarn at reasonable rates to weavers, while two mills in the cooperative sector are proposed to be set up shortly. It is also proposed to mix polyster thread in the farn to make it more attractive and useful and to effect improvement in designs and colours of handloom cloth.

For further development of the leather industry, it is proposed to establish more Tanneries in the state and to make processing facilities available to Tanners.

With small and village industries as the basis of economic growth and ushering in of a self generating economy, it is hoped that the day is not far off when the dream of total revolution would find a practical shape, with the entire landscape humning with industrial activity and every person provided with some gainful vocation in an atmosphere free from the dread of hunger and exploitation.

For the achievement of this goal, the state government is straining every nerve so that prosperity may once again dawn on this legendary land of milk and honey and a smile may be evoked on the worry faces of the teeming millions.

TABLE II

Industries	Azamgarh		Jaunpur		Ballia		Ghazipur		Varansi	
	Units	Persons Employed	Units	Persons Employed	Units	Persons Employed	Units	Persons Employed	Units	Persons Employed
Textile Products (Including Wearing Appared other than Footwear)	398	573	1007	2393	180	274	283	444	3621	13297
Metal Products and Parts (Except Machinery and Transport Equipment)	529	727	268	424	350	562	193	314	358	752
Wood and Wool Products, Furniture and Fixture	634	1326	468	1017	159	488	195	451	306	698
Wool, Silk and Synthetic Fibres Textiles	491	1907	39	73	22	48	101	344	337	1090
Beverages, Tobacco and Tobacco Products	91	222	190	448	68	188	89	287	267	732
Non-metalics, Mineral Products	1697	3639	774	1588	489	1103	594	1308	430	918
Food Products	3148	5881	2178	3901	2393	4612	1423	2483	2491	4430
Cotton Textiles	12054	34272	123	306	373	938	1272	3054	8772	27941
Others	648	1017	1630	1035	325	569	428	705	836	1571
Total	19690	49564	5677	11185	4359	8782	4578	9390	17418	51429

CHAPTER V

CONCLUSION AND SUGGESTIONS

The problem of high rate of growth of population has become acute in many parts of India. As the pressure of population on the land increases the whole fabric of agricultural and rural life undergoes a change. There is often an attempt to meet this situation by extensive cultivation and multiple cropping. The expansion of cultivation and the overcrowding in agriculture have resulted in diminution of the size of holdings and their improper distribution, which has caused a general lowering of the standard of living. Diversification in occupation, therefore, to accomodate the surplus of floating rural population, is the pressing need of India, and this can be done by the opening of new supplementary occupation and trades, particularly the cottage industries.

Large number of people, specially, those living in the rural areas, are unable to procure sufficiency in food, clothing and other bare necessities of life and a good percentage of them is in a state of constant want, semistarvation, enforced idleness and economic insecurity. The revival and expansion of old and the introduction of new cottage industries will be an important indispensible

means of rehabilitating the villages and providing adequate and suitable employment to the people in the villages and ensuring to them a satisfactory level of living.

The seasonal character of the agricultural operations has led to an uneven distribution of labour power. Some crops need more labour while others relatively less. The period of complete inactivity in each agricultural region,however, varies with the nature and variety of crops and cropping.

Indian cultivator is generally occupied roughly from 4 to 6 months in a year excepting in places where he grows more than one crop from the same land in a year, and the womenfolk who also participate in cultivation operations in some parts of India remain unoccupied even for a longer period of time during the year.

At present our industrial development is lopsided. All large-scale industries are highly concentrated in a few places. This has given rise to the problem of industrial housing, over crowding, uncleanliness in the factories and in residential places. Hence to evolve a healthy working class, it is urgently felt that cottage industries should be

developed in rural areas. The development of cottage industries will check the evils of the capitalistic system and provide regular employment not only to the village artisans but also to their dependents.

The prospects of successful development of cottage industries in India on economic lines are fairly promising. There are enormous resources in this country for the development of cheap electric power which could be utilised for small scale production in the rural areas. The artisan, though he has been charged with following routine methods of work inheritted through generation, is always ready to learn and adopt better methods when he is convinced about their practicability.

Thus it will be seen that there is a great wastage of rural labour in many parts of Uttar Pradesh, specially in Azamgarh, Jaunpur, Ballia, Ghazipur and Varansi. It is seldom that idle labourers hire themselves, as ordinary Coolies in the towns. They never move about in search of work. They can, however, do some work if opportunities are provided locally. It is, therefore, very essential that the manpower in the rural areas should be provided with more work, specially in the lean period when there is little work for them.

The Royal Commission on Agriculture emphasized that the leisure periods of villagers should be utilized in gainful vocation so that they could earn some living for themselves when they have no agricultural work. The Famine Enquiry Commission have also suggested for the development of agro-industries in rural areas, with the help of cheap electric power. The Uttar Pradesh Cottage Industries Sub-Committees (1947) is definitely of the opinion, "that the only way to fight the monster of unemployment is the development of small scale and cottage industries..."

The problem is to devise the best means of providing employment and occupation to the vast mass of rural population which remains idle during the off-seasons of agriculture.

All these combined should raise the national productivity, per capita income and the general standard of living specially of labours. In the light of these points agricultural labours, their problems and implication on the economic life of the country may be scrutinized.

The area under study falls within the backward region of Uttar Pradesh where a lot of development in the sphere of cottage industries could be undertaken. The

present study envisages to collect relevant data regarding cottage industries in the area, process them and finally present an integrated picture about their locational problems. In the recent years such studies have proved to be very fruitful where various parameters of location have been fully analysed and a decision has been arrived at for the location of cottage industries. This type of study has a mathematical bias and decision arrived at can be relied upon. Geographical models based upon relevant data can be constructed and solution to the locational problems could be suggested.

The present study makes a deviation from the past ones where various factors were considered for the location of cottage industries. A mathematical treatment of such problems may lead to a better result with respect to the locational analysis of such industries.

SYNOPSIS

Introduction

Chapter I: Meaning and Scope.

(a) Physical and cultural setting of the area.

(b) Historical aspect of Cottage Industries:

(i) Hindu Period

(ii) The Muslim Period

(iii) The British Period

(iv) The Post-independence Period.

Chapter II: The Locational Analysis of Handloom Industry (Saries).

(a) Labour factors- skill and wages

(b) The market factor

(c) The transport costs

(d) The raw material, its cost and specialization

(e) Capital as a factor

(f) Any other factors

(g) Government encouragement

Chapter III: The Locational Analysis of Handloom Industry (Carpets, bedsheets and coarse cloth)

Chapter IV: The Locational Analysis of Earthern-ware; The Locational Factors as given above.

Chapter V: The Distributional Pattern of Cottage Industries.

(a) The Ancient centres

(b) The changes occured during the various periods

(c) The present pattern and trend

(d) Factors responsible for confining in the present areas/limits

(e) Region/area of concentration

Chapter VI: The Linkage of Cottage Industry

(a) The links between types- Industries in terms of processing: Raw material, Labour, Skill, Quantity of goods produced and consumed.

(b) Regional links, areal links, links between centres of production.

Chapter VII: The Community of Cottage Industries

(a) The skilled labour with heriditry skill-particular caste/religion

(b) The retail trader/petty contractor at a local village/area/centre of production.

(c) The middleman or agent or bank at city

(d) The Karkhanadars or 'Thekedars' at the city like Varansi.

(e) The wholeseller or exporter, the whole net work of the persons engaged in the trade/ business/production or any other activity related to cottage industries of the region is to be built up.

Chapter VIII: The Problem of Cottage Industries

Chapter IX: Conclusion and Suggestions.

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